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#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Jeffrey Friedman, et al
)
Serial No.: 08/485,943
)
Filed: June 7, 1995
)
For: MODULATORS OF BODY
WEIGHT, CORRESPONDING
NUCLEIC ACIDS PROTEINS
AND DIAGNOSTIC AND
THERAPEUTIC USES THEREOF
)

Group Art Unit: 1805

Examiner: J. Railey

# WITH FORM PTO-1449

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

In compliance with 37 C.F.R. §1.97 and the continuing duty of disclosure under 37 C.F.R. §1.56, the applicants call to the attention of the examiner the enclosed documents, listed on the attached Form PTO-1449, which may be considered material to the examination of the above-identified patent application.

As a courtesy to the examiner and for ease of review, the applicants believe that the documents listed on the accompanying Form PTO-1449 may be organized as set forth below (each listing includes: Form PTO-1449 document number, title, inventor(s), patent number and/or application number, filing date, publication date, and, where applicable, priority dates). As a further courtesy to the examiner, the applicants have included, as Appendix A, a copy of the front page of each patent or patent application listed in the IDS and PTO Form-1449.

Pursuant to 37 C.F.R. §1.98(d), copies of the documents are not included herewith since they have been provided in USSN 08/292,345, filed August 17, 1994, and USSN 08/347,563, filed November 30, 1994, which are relied upon under 35 U.S.C. 120 for an earlier filing date in the instant application.

#### I. PEPTIDES

# A. Full or Truncated Documents:

Al Title: "Anti-Obesity Proteins" Inventors: DiMarchi et al. U.S. Patent No.: 5,521,283 U.S. Appl. No.: 381,666 Filed: January 31, 1995

A2 Title: "Anti-Obesity Proteins" Inventors: DiMarchi et al. U.S. Patent No.: 5.525,705 U.S. Appl. No.: 381,370 Filed: January 31, 1995

A3 Title: "Anti-Obesity Proteins" Inventors: DiMarchi et al. U.S. Patent No.: 5,532,336 U.S. Appl. No.: 381,034 Filed: January 31, 1995

A4 Title: "Anti-Obesity Proteins" Inventors: DiMarchi et al. U.S. Patent No.: 5,552,522 U.S. Appl. No.: 381, 040 Filed: January 31, 1995

A9 Title: "Anti-Obesity Proteins" Inventors: DiMarchi et al. U.S. Patent No.: 5,563,243 U.S. Appl. No.: 381,037 Filed: January 31, 1995

A10 Title: "Anti-Obesity Proteins" Inventors: DiMarchi et al. U.S. Patent No.: 5,563,244 U.S. Appl. No.: 381,050 Filed: January 31, 1995

All Title: "Anti-Obesity Proteins"
Inventors: DiMarchi et al.
U.S. Patent No.: 5,563,245
U.S. Appl. No.: 381,163
Filed: January 31, 1995

A12 Title: "Anti-Obesity Proteins" Inventors: DiMarchi et al. U.S. Patent No.: 5,567,678 U.S. Appl. No.: 381,041 Filed: January 31, 1995

A13 Title: "Anti-Obesity Proteins" Inventors: Basinski et al. U.S. Patent No.: 5,567,803 U.S. Appl. No.: 383,649 Filed: February 6, 1995

Priority Data: January 31, 1995 (U.S. Appl. No. 381,047)

A14 Title: "Anti-Obesity Proteins Inventors: DiMarchi et al. U.S. Patent No.: 5,569,743 U.S. Appl. No.: 381,054 Filed: January 31, 1995

A15 Title: "Anti-Obesity Proteins"
Inventors: Basinski et al.
U.S. Patent No.: 5,569,744
U.S. Appl. No.: 383,632
Filed: February 6, 1995
Priority Data: January 31, 1995 (U.S. Appl. No. 381,247)

A16 Title: "Anti-Obesity Proteins" Inventors: DiMarchi et al. U.S. Patent No.: 5,574,133 U.S. Appl. No.: 381,049 Filed: January 31, 1995

A17 Title: "Anti-Obesity Proteins" Inventors: DiMarchi et al. U.S. Patent No.: 5,580,954 U.S. Appl. No.: 381,057 Filed: January 31, 1995

A19 Title: "Anti-Obesity Proteins"
Inventors: Basinski et al.
U.S. Patent No.: 5,594,104
U.S. Appl. No.: 384,492
Filed: February 6, 1995

Priority Data: January 31, 1995 (U.S. Appl. No. 381,266)

A20 Title: "Anti-Obesity Proteins"

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Inventors: Basinski *et al.* U.S. Patent No.:5,605,886 U.S. Appl. No.: 442,916 Filed: May 17, 1995

Priority Data: February 6, 1995 (U.S. Appl. No. 383,648) January 31, 1995 (U.S. Appl. No. 381,265)

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A23 Title: "Anti-Obesity Proteins"

Inventors: Basinski et al. U.S. Patent No.: 5.691,309 U.S. Appl. No.: 383,650 Filed: February 6, 1995

Priority Data: January 31, 1995 (U.S. Appl. No. 381,451)

B1 Title: "Anti-Obesity Proteins"

Inventors: Basinski et al. Appl. No.: 96300612.7 Filed: January 29, 1996

Publication No.: EP 0 725 078 A1 Publication Date: August 7, 1996

Priority Data: January 31, 1995 (U.S. Appl. No. 381,048) February 6, 1995 (U.S. Appl. No. 383,638)

B2 Title: "Anti-Obesity Proteins"

Inventors: Basinski et al. Appl. No.: 96300613.5 Filed: January 29, 1996

Publication No.: EP 0 725 079 A1 Publication Date: August 7, 1996

Priority Data: January 31, 1995 (U.S. Appl. No. 381,048)
February 6, 1995 (U.S. Appl. No. 383,638)
June 22, 1995 (U.S. Appl. No. 60/000,450)

August 11, 1995 (U.S. Appl. No. 60/002,161)

B3 Title: "Rat Obese Gene, Its Gene Product and Its Production"

Inventors: Nakao et al. Appl. No.: 96105353.5 Filed: April 3, 1996

Publication No.: EP 0 736 599 A2 Publication Date: October 9, 1996

Priority Data: April 3, 1995 (JP Appl. No. 77966/95)

B5 Title: "Obesity Gene Product"

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Inventors: Hsiung et al. Appl. No.: 96303478.0 Filed: May 16, 1996

Publication No.: EP 0 743 321 A2 Publication Date: November 20, 1996

Priority Data: May 19, 1995 (US Appl. No. 445,305)

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B6 Title: "Rhesus OB Protein and DNA"

Inventors: Basinski et al. Appl. No.: 96303601.7 Filed: May 21, 1996

Publication No.: EP 0 744 408 A2 Publication Date: November 27, 1996

Priority Data: May 26, 1995 (U.S. Appl. No. 452,228) May 26, 1995 (U.S. Appl. No. 451,335)

B15 Title: "Rat Obese Gene, Product and Method of Producing

Thereof"

Inventors: Fujisawa et al. Appl. No.: 96JP-0079916

Filed: April 2, 1996

Publication No.: JP 8-333394

Publication Date: December 17, 1996

Priority Data: April 3, 1995 (JP Appl. No. 95JP-0077966)

B20 Title: "Anti-Obesity Proteins"

Inventors: Basinski *et al.* Appl. No.: PCT/US96/00947 Filed: January 29, 1996

Publication No.: WO 96/23514 Publication Date: August 8, 1996

Priority Data: January 31, 1995 (U.S. Appl. No. 08/381,247)

January 31, 1995 (U.S. Appl. No. 08/381,451)

January 31, 1995 (U.S. Appl. No. 08/381,266)

January 31, 1995 (U.S. Appl. No. 08/381,370)

January 31, 1995 (U.S. Appl. No. 08/381,047)

January 31, 1995 (U.S. Appl. No. 08/381,041)

January 31, 1995 (U.S. Appl. No. 08/381,057)

January 31, 1995 (U.S. Appl. No. 08/381,050)

January 31, 1995 (U.S. Appl. No. 08/381,034)

January 31, 1995 (U.S. Appl. No. 08/381,040)

January 31, 1995 (U.S. Appl. No. 08/381,163)

January 31, 1995 (U.S. Appl. No. 08/381,054)

January 31, 1995 (U.S. Appl. No. 08/381,666) January 31, 1995 (U.S. Appl. No. 08/381,049) January 31, 1995 (U.S. Appl. No. 08/381,037) February 6, 1995 (U.S. Appl. No. 08/383,632) February 6, 1995 (U.S. Appl. No.08/384,492) February 6, 1995 (U.S. Appl. No. 08/383,649) February 6, 1995 (U.S. Appl. No. 08/383,650)

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B21 Title: "Anti-obesity Proteins" Inventors: Basinski et al. Appl. No.: PCT/US96/00948

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Filed: January 29, 1996

Publication No.: WO 96/23515 Publication Date: August 8, 1996

Priority Data: January 31, 1995 (U.S. Appl. No. 08/381,048) February 6, 1995 (U.S. Appl. No. 08/383,638)

Title: "Anti-obesity Proteins" B22 Inventors: Basinski et al.

Appl. No.: PCT/US96/00950

Filed: January 29, 1996

Publication No.: WO 96/23516 Publication Date: August 8, 1996

Priority Data: January 31, 1995 (U.S. Appl. No. 08/381,265) February 6, 1995 (U.S. Appl. No. 08/383,648) May 17, 1995 (U.S. Appl. No. 08/442,916)

B23 Title: "Anti-obesity Proteins" Inventors: Basinski et al. Appl. No.: PCT/US96/00952

Filed: January 29, 1996

Publication No.: WO 96/23517

Publication Date: August 8, 1996 Priority Data: January 31, 1995 (U.S. Appl. No. 08/381,048)

> February 6, 1995 (U.S. Appl. No. 08/383,638) June 22, 1995 (U.S. Appl. No. 60/000,450) August 11, 1995 (U.S. Appl. No. 60/002,161)

B33 Title: "Biologically Active Peptide Fragments of OB Protein"

Inventors: Smith et al.

Appl. No.: PCT/GB96/01094

Filed: May 7, 1996

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Publication No.: WO 96/34885 Publication Date: November 7, 1996

Priority Data: May 5, 1995 (GB Appl. No. 9509164.1)

B36 Title: "Obesity Gene Product"

Inventors: Hsiung et al.

Appl. No.: PCT/US96/07045

Filed: May 16, 1996

Publication No.: WO 96/36644

Publication Date: November 21, 1996

Priority Data: May 19, 1995 (U.S. Appl. No. 08/445,305)

B37 Title: "Rhesus OB Protein and DNA"

Inventors: Basinski *et al.* Appl. No. PCT/US96/07329

Filed: May 21, 1996

Publication No.: WO 96/37517

Publication Date: November 28, 1996

Priority Data: May 26, 1995 (U.S. Appl. No. 08/451,335) May 26, 1995 (U.S. Appl. No. 08/452,228)

B47 Title: "Polypeptide Fragments Derived From The Obese Gene

Product"

Inventors: Mapelli et al.

Appl. No.: PCT/US96/17365

Filed: October 28, 1996

Publication No.: WO 97/16550 Publication Date: May 9, 1997

Priority Data: Nov.2, 1995 (U.S. Appl. No. 60/007,789)

B51 Title: "Mutational Variants Of Mammalian Ob Gene Proteins"

Inventors: Altmann *et al.*Appl. No.: PCT/US96/18561
Filed: December 3, 1996

Publication No.: WO 97/20933 Publication Date: June 12, 1997

Priority Data: Dec. 6, 1995 (U.S. Appl. No. 08/568,077)

B68 Title: "Fragments of Leptin (OB Protein)"

Inventors: Al-Barazanji et al. Appl. No.: PCT/EP97/02968

Filed: June 4, 1997

Publication No.: WO 97/46585 Publication Date: December 11, 1997

Priority Data: June 6, 1996 (G.B. Appl. No. 9611775.9) Sept. 5, 1996 (G.B. Appl. No. 9618540.0) Feb. 20, 1997 (G.B. Appl. No. 9703493.8)

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B76 Title: "Canine OB Protein Compositions And Methods"

Inventor: Hernday, N.

Appl. No.: PCT/US97/03209 Filed: February 28, 1997 Publication No.: WO 97/32022

Publication No.: wO 97/32022

Publication Date: September 4, 1997

Priority Data: March 1, 1996 (U.S. Appl. No. 08/609,408)

#### B. Thioether Bond

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Documents:

A18 Title: "Anti-obesity Proteins"

Inventors: Becker *et al.*U.S. Patent No.: 5,594,101
U.S. Appl. No.: 398,021
Filed: March 3, 1995

B29 Title: "Anti-obesity Proteins"

Inventors: Becker et al.

Appl. No.: PCT/US96/02932

Filed: March 1, 1996

Publication No.: WO 96/27385

Publication Date: September 12, 1996

Priority Data: March 3, 1995 (U.S. Appl. No. 08/398,021)

B41 Title: "Obesity Protein Intermediates and Their Preparation

and Use"

Inventors: Hale et al.

Appl. No.: PCT/US96/10613

Filed: June 20, 1996

Publication No.: WO 97/00886 Publication Date: January 9, 1997

Priority Data: June 22, 1995 (U.S. Appl. No. 60/000,451)

#### C. Cross-Linked

Documents:

A5 Title: "Anti-obesity Proteins"
Inventors: Basinski et al.
U.S. Patent No.: 5,552,523
U.S. Appl. No.: 384,183
Filed: February 6, 1995
Priority Data: January 31, 1995 (U.S. Appl. No. 381,458)

A6 Title: "Anti-obesity Proteins"
Inventors: Basinski et al.
U.S. Patent No.: 5,552,524

U.S. Appl. No.: 384,292 Filed: February 6, 1995

Priority Data: January 31, 1995 (U.S. Appl. No. 381,661)

A7 Title: "Anti-obesity Proteins"
Inventors: Basinski et al.
U.S. Patent No.: 5,554,727
U.S. Appl. No.: 383,631

Filed: February 6, 1995

Priority Data: January 31, 1995 (U.S. Appl. No. 381,033)

A8 Title: "Anti-obesity Proteins" Inventors: Basinski et al.
U.S. Patent No.: 5,559,208
U.S. Appl. No.: 383,639
Filed: February 6, 1995

Priority Data: January 31, 1995 (U.S. Appl. No. 381,031)

B19 Title: "Anti-obesity Proteins" Inventors: Basinski *et al.* Appl. No.: PCT/US96/00946

Filed: January 29, 1996

Publication No.: WO 96/23513 Publication Date: August 8, 1996

Priority Data: January 31, 1995 (U.S. Appl. No. 08/381,661) February 6, 1995 (U.S. Appl. No. 08/384,292) B24 Title: "Anti-obesity Proteins"

Inventors: Basinski et al. Appl. No.: PCT/US96/01345 Filed: January 29, 1996

Publication No.: WO 96/23518 Publication Date: August 8, 1996

Priority Data: January 31, 1995 (U.S. Appl. No. 08/381,031) February 6, 1995 (U.S. Appl. No. 08/383,639)

B25 Title: "Anti-obesity Proteins"

Inventors: Basinski et al. Appl. No.: PCT/US96/01412

Filed: January 29, 1996

Publication No.: WO 96/23519 Publication Date: August 8, 1996

Priority Data: Jan. 31, 1995 (U.S. Appl. No. 08/381,458) Feb. 6, 1995 (U.S. Appl. No. 08/384,183)

B26 Title: "Anti-obesity Proteins"

Inventors: Basinski et al. Appl. No.: PCT/US96/01415 Filed: January 29, 1996

Publication No.: WO 96/23520 Publication Date: August 8, 1996

Priority Data: January 31, 1995 (U.S. Appl. No. 08/381,033) February 6, 1995 (U.S. Appl. No. 08/383,631)

### D. Other Modifications

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Documents:

B4 Title: "Recombinant Obese (Ob) Proteins"

Inventors: Campfield et al. Appl. No.: 96106408.6 Filed: April 24, 1996

Publication No.: EP 0 741 187 A2 Publication Date: November 6, 1996

Priority Data: May 5, 1995 (U.S. Appl. No. 435,777) June 7, 1995 (U.S. Appl. No. 484,629) B16 Title: "Recombinant Obese (OB) Protein"

Inventors: Campfield et al. Appl. No.: 96JP-0112739

Filed: May 7, 1996

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Publication No.: JP 9-3098

Publication Date: January 7, 1997

Priority Data: June 7, 1995 (Appl. No. 95US-0484629) May 5, 1995 (Appl. No. 95US-0435777)

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B18 Title: "Appetite Suppression Factor and Related Methods"

Inventor: Weigle et al. Appl No.: PCT/US96/01471 Filed: January 22, 1996

Publication No.: WO 96/22308 Publication Date: July 25, 1996

Priority Data: January 20, 1995 (U.S. Appl. No. 08/377,068)

April 10, 1995 (U.S. App. No. 08/419,214)

June 7, 1995 (U.S. Appl. No. 08/486,459)

June 7, 1995 (U.S. Appl. No. 08/487,111)

June 7, 1995 (U.S. Appl. No. 08/486,450)

October 4, 1995 (U.S. Appl. No. 08/540,242)

B40 Title: "Chimeric Leptin Fused to Immunoglobulin Domain

and Use"

Inventors: Browne et al. Appl No.: PCT/GB96/01388

Filed: June 11, 1996

Publication No.: WO 97/00319 Publication Date: January 3, 1997

Priority Data: June 13, 1995 (GB Appl. No. 9511935.0)

B52 Title: "Ob Protein Derivatives Having Prolonged Half-Life"

Inventors: De Sauvage et al. Appl. No.: PCT/US96/20718 Filed: December 19, 1996 Publication No.: WO 97/24440 Publication Date: July 10, 1997

Priority date: Dec. 27, 1995 (U.S. Appl. No. 08/579,494) June 20,1996 (U.S. Appl. No. 08/667,184) B69 Title: "Ob Protein Binding Protein"

Inventor: Becker, G.W. Appl. No.: PCT/US97/09891

Filed: June 6, 1997

Publication No.: WO 97/46587

Publication Date: December 11, 1997

Priority Data: June 7, 1996 (U.S. Appl. No. 60/019,284)

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B77 Title: "Fibulin Pharmaceutical Compositions And Related

Methods"

Inventor: Bennett, L.G.

Appl. No.: PCT/US97/06280

Filed: April 3, 1997

Publication No.: WO 97/38014 Publication Date: October 16, 1997

Priority Data: April 4, 1996 (U.S. Appl. No. 08/627,636)

# II. METHODS FOR THE PREPARATION OF ANTI-OBESITY PROTEINS

Documents:

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A21 Title: "Process For Preparing Anti-Obesity Protein"

Inventor: Mackellar, W.C. U.S. Patent No.: 5,614,379 U.S. Appl. No.: 429,362 Filed: April 26, 1995

B7 Title: "Process For Preparing Anti-Obesity Protein"

Inventor: Mackellar, W.C. Appl. No.: 96302805.5 Filed: April 22, 1996

Publication No.: EP 0 745 610 A2 Publication Date: December 4, 1996

Priority Data: April 26, 1995 (U.S. Appl. No. 429,362)

B31 Title: "Anti-Obesity Agents"

Inventors: Beeley et al.

Appl. No.: PCT/US96/04909

Filed: April 5, 1996

Publication No.: WO 96/31526 Publication Date: October 10, 1996

Priority Data: April 6, 1995 (U.S. Appl. No. 08/419,598)

B32 Title: "Process For Preparing Anti-Obesity Protein"

Inventor: Mackellar, W.C. Appl. No.: PCT/US96/05703

Filed: April 24, 1996

Publication No.: WO 96/34111 Publication Date: October 31, 1996

Priority Data: April 26, 1995 (U.S. Appl. No. 08/429,362)

### III. OB GENE PRODUCT ANTIBODIES

#### Documents:

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B27 Title: "OB Gene Product Antibodies"

Inventors: Heath et al.

Appl. No.: PCT/US96/00957

Filed: January 29, 1996

Publication No.: WO 96/23815
Publication Date: August 8, 1996

Priority Data: January 31, 1995 (U.S. Appl. No. 08/381,264)

#### IV. OB DNA-RELATED

#### A. DNA

#### Documents:

B9 Title: "DNA Encoding Primate Leptins as Medicinal

Proteins"

Inventors: Basinski *et al.* Appl. No.: 96306721.0 Filed: September 16, 1996

Publication No.: EP 0 764 722 A2 Publication Date: March 26, 1997

Priority Data: September 19, 1995 (U.S. Appl. No. 3,935) September 19, 1995 (U.S. Appl. No. 3,936)

B28 Title: "Human Obesity Gene"

Inventors: Basinski et al. Appl. No.: PCT/US96/01411

Filed: January 29, 1996

Publication No.: WO 96/24670 Publication Date: August 15, 1996

Priority Data: Feb. 6, 1995 (U.S. Appl. No. 08/384,493) May 26, 1995 (U.S. Appl. No. 08/451,250) B34 Title: "Nucleic Acids For Treating Obesity"

Inventors: Giese et al.

Appl. No.: PCT/US96/06609

Filed: May 8, 1996

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Publication No. WO 96/35787

Publication Date: November 14, 1996

Priority Data: May 8, 1995 (U.S. Appl. No. 08/437,834)

B39 Title: "Method For The Detection Of Compounds That

Modulate The Effects Of The Obese Protein"

Inventors: Beeley et al.

Appl. No.: PCT/EP96/02291

Filed: May 28, 1996

Publication No.: WO 96/38586 Publication Date: December 5, 1996

Priority Data: May 30, 1995 (G.B. Appl. No. 9510857.7) June 8, 1995 (G.B. Appl. No. 9511602.6)

B43 Title: "DNA Encoding Medicinal Proteins"

Inventors: Basinski et al. Appl. No.: PCT/US96/14810 Filed: September 16, 1996 Publication No.: WO 97/11192 Publication Date: March 27, 1997

Priority Data: Sept. 19, 1995 (U.S. Appl. No. 60/003,935) Sept. 19, 1995 (U.S. Appl. No. 60/003,936)

#### B. Gene Regulation

Documents:

A24 Title: "Transcriptional Promoter Of The Murine Obesity

Gene"

Inventors: de la Brousse et al. U.S. Patent No.: 5,698,389

Appl. No.: 558,545

Filed: November 16, 1995

B30 Title: "Modulators Of OB Gene And Screening Methods

Therefor"

Inventors: Briggs et al.

Appl. No.: PCT/US96/03808

Filed: March 19, 1996

Publication No.: WO 96/29405

Publication Date: September 26, 1996

Priority Data: March 20, 1995 (U.S. Appl. No. 08/408,584)

April 5, 1995 (U.S. Appl. No. 08/418,096) August 2, 1995 (U.S. Appl. No.08/510,584) October 30, 1995 (U.S. Appl No. 08/558,588) Nov. 21, 1995 (U.S. Appl. No. 60/007,390) Nov. 30, 1995 (U.S. Appl. No. 60/007,721) Dec.14, 1995 (U.S. Appl. No. 60/008,601)

B49 Title: "The Transcriptional Promoter Of The Obesity Gene"

Inventors: de la Brousse et al. Appl. No.: PCT/US96/18474 Filed: November 18, 1996 Publication No.: WO 97/18228 Publication Date: May 22, 1997

Priority date: Nov. 16, 1995 (U.S. Appl. No. 08/558.545)

### V. METHODS/MEDICAL DIAGNOSIS OR TREATMENT

A. Methods for Treatment of Obesity

Documents:

B17 Title: "Compositions And Methods For The Treatment Of

Body Weight Disorders, Including Obesity"

Inventor: Tartaglia, L.

Appl. No.: PCT/US95/10918

Filed: August 23, 1995

Publication No.: WO 96/05861 Publication Date: February 29, 1996

Priority Data: August 23, 1994 (U.S. Appl. No. 294,522)

June 6, 1995 (U.S. Appl. No. 470,868)

B48 Title: "Inhibition Of Fatty Acid Synthase As A Means To

Reduce Adipocyte Mass"
Inventors: Kuhajda et al.
Appl. No.: PCT/US96/17678
Filed: November 15, 1996
Publication No.: WO 97/18806
Publication Date: May 29, 1997

Priority Data: Nov. 17, 1995 (U.S. Appl. No. 60/006,940)

B 71 Title: "OB Protein Compositions and Method"

Inventors: Pelleymounter et al. Appl. No.: PCT/US96/08225

Filed: May 30, 1996

Publication No.: WO 96/40912

Publication Date: December 19, 1996

Priority Data: June 7, 1995 (U.S. Appl. No. 08/474.833

B72 Title: "Methods of Reducing Or Maintaining Reduced Levels

of Blood Lipids Using OB Protein Compositions"

Inventors: Pelleymounter *et al.* Appl. No.: PCT/US96/12674

Filed: August 2, 1996

Publication No.: WO 97/06816 Publication Date: February 27, 1997

Priority Data: August 17, 1995 (U.S. Appl. No. 08/516,263)

### B. Methods for Treatment of Diabetes

Documents:

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B42 Title: "Methods For Treating Diabetes"

Inventor: Stephens, T.W. Appl. No.: PCT/US96/10983

Filed: June 26, 1996

Publication No.: WO 97/02004 Publication Date: January 23, 1997

Priority Data: June 30, 1995 (U.S. Appl. No. 60/000,718)

### C. Methods for Treatment/Combination Therapy Documents:

**B8** Title: "Methods Of Treating Neuropeptide Y-Associated

Conditions"

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Inventors: Bue-Valleskey et al.

Appl. No.: 96304723.8 Filed: June 26, 1996

Publication No.: EP 0 759 441 A2 Publication Date: February 26, 1997

Priority Data:

June 30, 1995 (U.S. Appl. No. 740) October 27, 1995 (U.S. Appl. No. 5910) June 30, 1995 (U.S. Appl. No. 752) October 27, 1995 (U.S. Appl. No. 5911)

Title: "Susceptibility Gene For Obesity And Type II Diabetes B35

Mellitus"

Inventors: Shuldiner et al. Appl. No.: PCT/US96/07218

Filed: May 17, 1996

Publication No.: WO 96/36641

Publication Date: November 21, 1996

Priority Data: May 19, 1995 (U.S. Appl. No. 08/446,530)

Title: "Liposome Formulations Of  $5\beta$  Steroids" B44

Inventors: Rubinfeld et al. Appl. No.: PCT/US96/15507 Filed: September 27, 1996 Publication No.: WO 97/13500 Publication Date: April 17, 1997

Priority Data: Oct. 12, 1995 (U.S. Appl. No. 08/542,083)

B46 Title: "Combination Therapy For The Treatment Of Diabetes

And Obesity"

Inventor: Smith, R.G.

Appl. No.: PCT/US96/17444

Filed: October 31, 1996

Publication No.: WO 97/16189 Publication Date: May 9, 1997

Priority Data: Nov. 1, 1995 (U.S. Appl. No. 60/007,138)

Feb. 22, 1996 (G.B. Appl. No. 9603724.7)

# D. Methods for Treatment/Other Documents:

B38 Title: "Methods For Treating Anorexia"

Inventor: Beasley, C.M. Jr. Appl. No.: PCT/US96/07467

Filed: May 23, 1996

Publication No.: WO 96/38152 Publication Date: December 5, 1996

Priority Data: June 1, 1995 (U.S. Appl. No. 08/457,249)

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B45 Title: "Methods For Restoring Or Enhancing Reproductive

Function In Reproductively Impaired Hosts"

Inventor: Chehab. F.F.

Appl. No.: PCT/US96/17163

Filed: October 22, 1996

Publication No.: WO 97/15322 Publication Date: May 1, 1997

Priority Data: Oct. 22, 1995 (U.S. Appl. No. 60/006,106)

B60 Title: "Methods For Using The Obese Gene And Its Gene

Product To Stimulate Hematopoietic Development"

Inventors: Snodgrass et al. Appl. No.: PCT/US97/00767

Filed: January 21, 1997

Publication No.: WO 97/27286 Publication Date: July 31, 1997

Priority Data: January 23, 1996 (U.S. Appl. No. 08/589,915)

March 20, 1996 (U.S. Appl. No. 08/618,957) Sept. 13, 1996 (U.S. Appl. No. 08/713,296)

B73 Title: "Methods of Increasing Lean Tissue Mass Using OB

Protein Compositions"

Inventors: Pelleymounter et al. Appl. No.: PCT/US96/17718 Filed: November 4, 1996

Publication No.: WO 97/18833 Publication Date: May 29, 1997

Priority Data: Nov. 22, 1995 (U.S. Appl. No. 08/561,732)

# VI. OBESITY PROTEIN FORMULATIONS

Documents:

1

B10 Title: "Obesity Protein Formulations"

Inventors: Beals et al Appl. No.: 97300299.1 Filed: January 17, 1997

Publication No.: EP 0 784 979 A2 Publication Date: July 23, 1997

Priority Data: February 7, 1996 (GB Appl. No. 9602408) January 19, 1996 (U.S. Appl. No. 10229)

B11 Title: Obesity Protein Formulations"

Inventors: Beals et al. Appl. No.: 97300300.7 Filed: January 17, 1997

Publication No.: EP 0 784 981 A2 Publication Date: July 23, 1997

Priority Data: February 7, 1996 (G.B. Appl. No. 9602410) January 19, 1996 (U.S. Appl. No. 10357)

B12 Title: Obesity Protein Formulations"

Inventors: Beals et al. Appl. No.: 97300302.3 Filed: January 17, 1997

Publication No.: EP 0 784 982 A2 Publication Date: July 23, 1997

Priority Data: February 7, 1996 (G.B. Appl. No.9602409) January 19, 1996 (U.S. Appl. No. 10257)

B13 Title: "Obesity Protein Formulations"

Inventors: Beals et al. Appl. No.: 97300301.5 Filed: January 17, 1997

Publication No.: EP 0 786 256 A2 Publication Date: July 30, 1997

Priority Data: January 19, 1996 (U.S. Appl. No. 10,244) February 7, 1996 (G.B. Appl. No. 9,602,406) B14 Title: "Formulations of Obesity Protein"

Inventors: Beals et al. Appl. No.: 97301995.3 Filed: March 24, 1997

Publication No.: EP 0 797 999 A2 Publication Date: October 1, 1997

Priority Data: March 26, 1996 (U.S. Appl. No. 14177) April 5, 1996 (U.S. Appl. No. 14951)

B54 Title: "Obesity Protein Formulations"

Inventors: Beals et al.

Appl. No.: PCT/US97/00864

Filed: January 17, 1997

Publication No.: WO 97/26004 Publication Date: July 24, 1997

Priority Data: January 19, 1996 (U.S. Appl. No. 60/010,229) February 7, 1996 (GB Appl. No. 9602408.8)

B55 Title: "Obesity Protein Formulations"

Inventors: Beals et al.

Appl. No.: PCT/US97/00568

Filed: January 17, 1997

Publication No.: WO 97/26011 Publication Date: July 24, 1997

Priority Data: Jan. 19, 1996 (U.S. Appl. No. 60/010,257) February 7, 1996 (G.B. Appl. No. 9602409.6)

B56 Title: "Obesity Protein Formulations"

Inventors: Beals et al.

Appl. No.: PCT/US97/00790

Filed: January 17, 1997

Publication No.: WO 97/26012 Publication Date: July 24, 1997

Priority Data: January 19, 1996 (U.S. Appl. No. 60/010,357) February 7, 1996 (G.B. Appl. No. 9602410.4)

B57 Title: "Obesity Protein Formulations"

Inventors: Beals et al.

Appl. No.: PCT/US97/00900

Filed: January 17, 1997

Publication No.: WO 97/26013 Publication Date: July 24, 1997

Priority Data: January 19, 1996 (U.S. Appl. No. 60/010,244) February 7, 1996 (GB Appl. No. 9602406.2) B59 Title: "Obesity Protein Analog Compounds and Formulations

Inventors: Hoffman et al. Appl. No.: PCT/US97/01189

Filed: January 24, 1997

Publication No.: WO 97/26916 Publication Date: July 31, 1997

Priority Data: Jan. 25, 1996 (U.S. Appl. No. 60/011,055)

Title: "Obesity Protein Compounds and Formulations B61

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Inventor: Hoffman, J.A.

Appl. No.: PCT/US97/01188

Filed: January 24, 1997

Publication No.: WO 97/28824 Publication Date: August 14, 1997

Priority Data: Feb. 6, 1996 (U.S. Appl. No. 60/011,238)

B63 Title: "Formulations Of OB Protein"

Inventors: Beals et al.

Appl. No.: PCT/US97/04914

Filed: March 24, 1997

Publication No.: WO 97/35620 Publication Date: October 2, 1997

Priority Data: March 26, 1996 (U.S. Appl. No. 60/014,177) April 5, 1996 (U.S. Appl. No. 60/014,951)

### VII. RECEPTORS

A. OB Receptors

Documents:

Title: "HU-B1.219, A Novel Human Hematopoietin A22

Inventors: Snodgrass et al. U.S. Patent No.: 5,643,748 U.S. Appl. No.: 306,231 Filed: September 14, 1994

Title: "The OB Receptor And Methods Of Diagnosing And ...... B50

Inventors: Tartaglia et al. Appl. No.: PCT/US96/19128 Filed: November 27, 1996 Publication No.: WO 97/19952 Publication Date: June 5, 1997

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Priority Data: Nov. 27, 1995 (U.S. Appl. No. 08/562,663)

Dec. 4, 1995 (U.S. Appl. No. 08/566,622) Dec. 8, 1995 (U.S. Appl. No. 08/569,485) Dec. 11, 1995 (U.S. Appl. No. 08/570,142) Dec. 28, 1995 (U.S. Appl. No. 08/583,153) Jan. 22, 1996 (U.S. Appl. No. 08/599,455) April 26, 1996 (U.S. Appl. No. 08/638,524) Sept. 3, 1996 (U.S. Appl. No. 08/708,123)

Title: "Detection of a Leptin Receptor Variant And Methods B58 For Regulating Obesity"

Inventors: Snodgrass et al. Appl. No.: PCT/US97/00881 Filed: January 17, 1997

Publication No.: WO 97/26523 Publication Date: July 24, 1997

Priority Data: January 18, 1996 (U.S. Appl. No. 08/588,526)

Title: "Rat OB Receptors And Nucleotides Encoding Them" B62

Inventors: Hess et al.

Appl. No.: PCT/US97/02397 Filed: February 18, 1997 Publication No.: WO 97/31015

Publication Date: August 28, 1997 Priority Data: Feb. 22, 1996 (U.S. Appl. No. 60/090,405) March 22, 1996 (U.S. Appl. No. 60/013,969) April 25, 1996 (GB Appl. No. 9608473.6)

**B64** Title: "Leptin Assay"

Inventors: Rosenblum et al. Appl. No.: PCT/US97/06505

Filed: April 18, 1997

Publication No.: WO 97/40380 Publication Date: October 30, 1997

Priority Data: April 22, 1996 (U.S. Appl. No. 60/061,051) June 6, 1996 (G.B. Appl. No. 9611785.8)

Nov. 15, 1996 (U.S. Appl. No. 60/031,002)

B65 Title: "OB Protein Receptor Genes And Use Of The Same"

Inventors: Iida et al.

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Appl. No.: (PCT)WOJP9701470 [97WO-J01470]

Filed: April 24, 1997

Publication No.: WO 97/41217 A1 Publication Date: November 6, 1997

Priority Data: April 30, 1996 (JP Appl. No. JP 96-134422)

B66 Title: "Detection Of The Leptin Receptor In Reproductive Organs And Methods For Regulating Reproductive Biology"

Inventors: Snodgrass et al. Appl. No.: PCT/US97/07676

Filed: April 28, 1997

Publication No.: WO 97/41263 Publication Date: November 6, 1997

Priority Data: April 29, 1996 (U.S. Appl. No. 08/640,389)

B67 Title: "OB Receptor Isoforms And Nucleic Acids Encoding Them"

Inventors: Caskey et al.

Appl. No.: PCT/US97/07521

Filed: May 2, 1997

Publication No.: WO 97/42340

Publication Date: November 13, 1997

Priority Data: May 6, 1996 (U.S. Appl. No. 60/016,899) May 24, 1996 (G.B. Appl. No. 9610995.4)

B74 Title: "OB Protein Receptor And Related Compositions And

Methods"

Inventors: Chang et al.

Appl. No.: PCT/US97/00128

Filed: January 2, 1997

Publication No.: WO 97/25424 Publication Date: July 17, 1997

Priority Data: Jan. 4, 1996 (U.S. Appl. No. 08/582,825)
Dec. 31, 1996 (U.S. Appl. No. 08/774,414)

B75 Title: "OB. The Receptor For Leptin, Nucleic Acids

Encoding The Receptor, And Uses Thereof"

Inventors: Friedman et al. Appl. No.: PCT/US97/01010 Filed: January 16, 1997

Publication No.: WO 97/26335 Publication Date: July 24, 1997

Priority Data: Jan. 16, 1996 (U.S. Appl. No. 08/586, 594) Feb. 14, 1996 (U.S. Appl. No. 08/599, 974)

#### B. Other

### Documents:

B53 Title: "WSX Receptor And Ligands"

Inventors: Bennett et al.

Appl. No.: PCT/US97/00325

Filed: January 7, 1997

Publication No.: WO 97/25425 Publication Date: July 17, 1997

Priority Data: January 8, 1996 (U.S. Appl. No. 08/585,005) June 20, 1996 (U.S. Appl. No. 08/667,197)

B70 Title: "A Novel Haemopoietin Receptor And Genetic

Sequences Encoding Same" Inventors: Hilton et al.

Appl. No.: PCT/AU96/00607 Filed: September 26, 1996 Publication No.: WO 97/12037 Publication Date: April 3, 1997

Priority Data: September 26, 1995 (AU Appl. No. PN 5641)

Documents B15, B16, and B65 are Japanese language patent or patent application documents and as such are being provided with English-language abstracts. Further, document B3 is the European counterpart to document B15, while document B4 is the European counterpart to document B16.

This statement and the accompanying items of information, including a Form PTO-1449, are being submitted after receipt of a first official action on the merits in the above-identified patent application under 37 C.F.R. §1.97(c). Enclosed is a check for the requisite \$240.00 fee under §1.17(p). If it is determined that any additional fee is due, the Commissioner is hereby authorized to charge Deposit Account No. 11-1153.

Respectfully submitted,

By:

Christine E. Dietzel Agent for Applicants Registration No. 37,309

Date: February 24, 1998

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT(S): FRIEDMAN ET AL.

SERIAL NO.: 08/485,943 EXAMINER: G. DRAPER

DATE FILED: JUNE 7, 1995 ART UNIT: 1803

FOR: MODULATORS OF BODY WEIGHT, CORRESPONDING NUCLEIC ACIDS AND PROTEINS, AND DIAGNOSTIC AND

(Signature and Date)

THERAPEUTIC USES THEREOF

**CERTIFICATE OF MAILING UNDER 37 CFR § 1.8** 

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the ASSISTANT COMMISSIONER FOR PATENTS, WASHINGTON, DC 20231 on June

David A. Jackson (Registration No. 26,742)

(Name of Registered Representative)

Assistant Commissioner for Patents

Washington, D.C. 20231

6/16/97

Sir:

### INFORMATION DISCLOSURE STATEMENT

In accordance with Applicant's and Applicant's representatives' Duty of Disclosure under 37 CFR § 1.56, and pursuant to 37 CFR § 1.97 and MPEP 717.05(b), Applicant submits herewith documentary information for consideration by the Examiner. Information herein cited is only set forth in fulfillment of Applicant's duty of candor in disclosing all information brought to his attention, and is not an admission that it can be used adversely. The publications forwarded herewith are listed on the enclosed Form PTO-1449. Applicant requests that the Examiner, upon reviewing the enclosed materials, initial the enclosed form and return a copy thereof in accordance with the instructions on the form.

Since all the publications (AA through HO) listed on the attached Form PTO-1449 were already supplied with an Information Disclosure Statement in connection with Application U.S. Serial No. 08/292,345, filed on August 17, 1994, pursuant to 37 CFR § 1.98(d) copies of the cited references are hereby not enclosed.

For the convenience of the Examiner, the applicants have broken down the listed references into twelve groups with respect to the subject matter of the references. The groups include.

I.Mapping and Cloning of Obesity Associated Genes

II. Obesity-Associated Proteins, Genes, Mutants and their Regulation

III.Ob Encoded Proteins, Fragments Thereof, and Their Biological Effects

IV. Biology, Physiology and Genetics of Obesity and Weight Regulation

V.Gene Mapping (General)

VI. Pharmaceutical and Pharmacological Methods and Materials, Drug Delivery

VII. Molecular Biological and Recombinant Methods and Therapies

VIII. Modification of Proteins

IX.Immunological Materials and Methods

X.Analytical Methods

XI.Synthetic Methods

XII.Receptors/Ligands

XIII.Miscellaneous

The references are set out in alphabetical order in each section.

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No fee is believed due for the filing of this statement inasmuch as it is being filed before the mailing of the first official action on the merits. However, should the Patent and Trademark Office determine otherwise, authorization is hereby given to charge Deposit Account No. 11-1153 for this filing.

David A. Jackson Attorney for Applicants

Respectfully submitted,

Attorney for Applicants Registration No. 26,742

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